1: McGee E-5 (1894-1895):898 NU31 Seri NU31

ripening); most of the larger muscles were already gnawed away, leaving loose ends of fiber and strings of tendon clinging to the bone, the condition being such that the remaining flesh might easily have been cut and scraped away by means of a knife; yet whenever a warrior or woman or youth hungered he or she took down the heavy joint, squatted or sat on the ground with back to one side of the doorway, held the mass at the height of the mouth, and gnawed, sucked, and swallowed, frequently tearing the tissue by twisting and backward jerks of the head, and not only masticating, but swallowing the free ends of tendons still attached to the bone. This process was varied only by seizing with the hands and tearing off a strip of flesh or skin already loosened by the teeth; and it was continued until the bones were practically clean, when they were wrenched apart by the stronger men in order that the cartilaginous cushions and epiphyses might be gnawed away. The only approach to cooking or carving was a parboiling of the foot, after the leg was wrenched off at the hock, until the hoof was sufficiently softened to be knocked off with the protolithic hupf[1] shown in plate XLIII, when half a dozen matrons and well-grown maidens gathered about to gnaw the gelatinous tissue (already softened by incipient decay as well as by the parboiling) investing the coffin bone. The entire procedure in this as in many other cases proclaimed the absence of knife-sense. The Caucasian huntsman does not have to think of his knife when game is to be bled or skinned or dissected; his habit-trained hand knows where to find the implement, how to seize it, and in most cases how to wield it advantageously; but the Seri hand possesses no such cunning, and uses the knife only clumsily and at second thought, if at all. The Seri huntsman, on the other hand, does not have to think of nails and teeth, for they are trained and coordinated by hereditary habit to spontaneously act in unison and with the utmost possible or needful vigor; while the Caucasian at least has completely lost the claw-and-teeth instinct of offense and defense.

Conformably with their striking independence of knives, the Seri are conspicuously unskilful in all mechanical operations involving the use of tools. Their most elaborate manufacture is the balsa, made from reeds broken at the butts and with the leaves and tops removed by the hands or by fire, bound together with hand-made cords; next in elaborateness come the bow and arrow, normally made without cutting tools; then follows their fictile ware, which is made wholly by hand, without aid of the simple molds and paddles and other devices used by neighboring tribes; while their primitive fabrics were apparently of hand-extracted fibers, twisted and woven wholly by hand, with the aid of wood or bone perforators in sewing and possibly in weaving. Practically the Seri possess but a single tool, and this is applied to a peculiarly wide variety of purposes—it is the originally natural cobble used for crushing bones and severing tendons, for grinding seeds and

[1] De Smet pounce, p. 188.

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

291 erty even transcending the poor apparel, flimsy habitations, and generally ill-developed artifacts of the lowly tribe.

[237] The most prominent personal possession is the pelican-skin robe; it is usually made of six skins, slightly dressed and in full plumage, sewed together with sinew in a conventional pattern of such sort as to give the greatest possible expanse consistent with the irregular outlines of the individual skins, and at the same time to display a conventional color pattern on the feathered side, the colors ranging from the dorsal slate to the ventral white of the fowl (as indicated in plate XXIII); sometimes there are only four skins and rarely there are eight, but the conventional arrangement is maintained. Before the beginning of a

[301] [824]

FIG. 5—Dried flower necklace.

[177] fairly regular barter at Rancho de Costa Rica, and hence before the introduction of manta and other stuffs, the pelican-skin robes were supplemented by kilts made of mesquite root or other fibers, spun and twisted

● [286] in the fingers and woven probably on some primitive device no longer in use; but so far as is known these native fabrics were devoid of decorative patterns in color or weave. Less habitually a short wammus or shirt, with long sleeves, made of a material similar to that of the kilt, was worn: but it, too, was without ornamentation, so far as can be ascertained. The remaining article of utilitarian apparel is the belt, usually consisting of a strip of skin (of deer, rabbit, peccary, etc), slightly dressed with the hair on; frequently this is replaced by a cord or braided band of human hair, while the favorite belt of some of the

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

283 gualla by the 1895 expedition), and then hatcheled with the hupf or the edge of a shell; when the fibers are gathered in slender wisps or loosely wound coils, both of which were among the possessions of the Seri matrons at Costa Rica in 1894. So far as could be ascertained, the final processes parallel those of hair-cord making, i. e., the fibers are patiently sorted into strands, sized in the fingers and twisted by rolling on the thigh, the strands being subsequently combined in similar fashion.[1] Neither the weaving nor the woven fabrics of the Seri have ever been seen by technologic students so far as known, though the fabrics are shown in Von Bayer's photographs and have been described by various observers. According to Señor Encinas, they resemble coarse bagging, and are woven or netted quite plainly. The ordinary sewing material is sinew, used in connection with a bone awl (a good example of which is illustrated in figure 35), a fish

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[239]

FIG. 35.—Bone awl.

FIG. 36.—Wooden awls.

spine or bone, a cactus thorn, or either the mandible of a water-bird or a hard-wood skewer shaped after this natural needle (figure 36 *a* and *b*). Sometimes hair or vegetal fiber is substituted for the sinew; and for certain purposes an agave thorn, with the fibers naturally attached, serves for needle and thread.

[524] [1] A rope-twisting device of the sort commonly employed by southwestern Indians was found in use by Seri boys at Costa Rica in 1894, and was included in the Seri collection; but the indications were that the device was a mere toy used, like the horse-hair rattle made by its side, only in youthful sports.

2: Kroeber E-5 (1930)1931 NU31 Seri NU31

middle. Two imperfect wind-breaks of brush, less than a quarter of a circumference in curvature, stood near the camp..

On the subject of textiles and textile clothing (pp. 171, 225-232), McGee is necessarily vague on account of lack of specimens. He says that native kilts, from waist to knee, were either of birdskin or "a rectangle of coarse textile fabric," "woven probably on some primitive device"; that it is practically certain that a long-sleeved, short-bodied shirt or wammus is "of local aboriginal design" and was "made primitively of haircloth or native textiles"; that the probable genetic series of Seri garments was: 1, the pelican-skin robe used as a kilt, 2, the textile shirt, 3, the textile kilt; and that Seri fabrics, according to a Mexican informant, "resemble coarse bagging, and are woven or netted quite plainly."

Human hair cord could be netted, or twined in double weft into basket-like bags or mats; it could hardly be woven into cloth without a loom. The same holds of *ixtle*, agave fiber. Bast of willow, cottonwood, beanstalk, such as was spun and twined, and perhaps woven on a limited scale, by the Colorado river Yuman tribes, was not available to the Seri, though they may have had nearly equally soft substitutes, even in their desert. Cotton they did not have. *Ixtle* is a strong, harsh fiber, excellent for cordage, nets, open-mesh bags, and the like, and still largely used in Mexico for such purposes. It would also serve well for fringe-aprons, for which the Lower Californians used it. A fabric from it would be rough and stiff, giving little warmth, not very satisfactory for a kilt, and quite unserviceable for a fitted garment like a sleeved shirt. Cotton was the prevailing garment material found along the coast by the first Spaniards, north up to the Cahita (Ka'ita, namely Tehueco, Mayo, Yaqui); here *ixtle* became more prevalent though cotton persisted; but the type of garment is not clear.

As to looms, *ixtle* is today woven into carrying bags on a heddled belt-loom by the Nahua-speaking Indians of Sinaloa. The Mayo weave woolen girdles on a similar loom. They also weave woolen blankets on a demountable horizontal loom, the warp passing continuously around the two heavy yarn beams. It is not clear whether this is a hybrid Spanish or a purely native apparatus. The Opata and Pima Bajo loom is not known. The American Pima weave cotton both on a belt-loom and on a staked horizontal loom, but with warps in a single plane.[9] It is difficult to imagine these looms existing among the Seri, except the first mentioned; and this would not yield them much in the way of garments. There is no reason why they should have worn more than the Lower Californian women's fringe-aprons, supplemented perhaps by birdskin blankets and loin covers. They no doubt secured occasional garments from neighboring tribes, as they gladly but irregularly wear those of whites today; and this

[9] Russell, BAE-R, 26:148-153, 1908.

ingenuity of a modern shipbuilder to have constructed a boat. These simple, desert people, however, through centuries of struggle for life in their desolate realm had learned to use every natural material available to them, however laborious the tasks and inefficient the products. The carrizal reed, *Phragmites communis*, grows about the few permanent water holes of Seriland, and from countless numbers of these slender, buoyant canes they built their watercraft. The reeds were stripped of leaves and gathered in long bundles, bound together and gradually augmented by more and more interlaced canes until a bundle 18 to 30 feet long and 1½ feet in diameter, tapering at both ends, was made. Three of these were then bound together with cords of fiber or human hair, making a maneuverable one or two man raft, easily transported to the shores.

The mesquite tree, *Prosopis juliflora*, provided fiber for cords. The flexible outer tissues of the roots were stripped off, soaked and progressively pounded, split and worked between hand and mouth until very slender, fibrous threads were obtained which were then twisted into cords. In some cases a coarse, rough fabric was woven from these fibers, but most garments were made of pelican skins. The strips of workable mesquite root or sometimes yucca fiber were also used in making doughnut-shaped head pads which aided in balancing the capacitous earthen water jars as they were carried on the heads of the women over rough and stony trails from water hole to camp site.

While occupying the turtle fishing camps on El Infiernillo during the good season, vegetable supplements to the fishy diet were few. Every nourishing seed or woody fruit yielded by the desert was carefully gathered; even the tiny seeds of the sea grass, *Ruppia*, were sorted from beach drift and made into meal. Never did the Seris learn to cultivate any crop or domesticate any animals other than the half wild coyote dogs that lived in mutual toleration with them. Even had they done so, their success in the barren, waterless land would have been small.

Sterile as is the Seri's hinterland, for a time each summer the thorny plants with which it is so profusely stocked ripen an abundant crop of fruit. The cacti in particular yield a wonderful harvest of luscious and succulent fruits, and toward this fortuitous supply the Seris were accustomed to move in June and July. The foothills of Sierra Seri on the mainland are adorned with great numbers of giant cacti, *Pachycereus Pringlei*, *Carnegiea gigantea* and *Lemaireocereus Thurberi* from which the luscious pitahayas were readily knocked down when ripe. The Indians wandered into the cactus forest and after a simple ritual marking the beginning of the feast, proceeded to gorge themselves for weeks on the succulent fruit until waning supply and cloying appetite drove them back to more severe food-getting activity by the sea. They did not customarily find it necessary to leave the cactus forest, however, as soon as the supply of fruits was no longer sufficient, for by the time the fruiting season was ended they had provided themselves with a second harvest. The pitahayas, gorged in such tremendous quantity throughout the season, were very imperfectly digested; the miriads of hard seeds, particularly, passed through the system unchanged and with the preservation of these in mind the Indians carefully collected with the aid of large sea shells all such seedy discharges and let them dry in the desert sun. Thus, as the supply of fresh fruit faded they proceeded to the use of this hoard